

CLAIM ADMENDMENTS:

1. (currently amended) A low alloyed high speed tool steel, which consists essentially of, by weight %, C: 0.50-0.75%, Si: 0.02-2.00%, Mn: 0.1-3.0%, P: up to 0.050%, S: up to 0.010%, Cr: 5.0-6.0%, W: 0.5-2.0%, V: 0.70-1.25%, Al: up to 0.1%, O: up to 0.01% and N: up to 0.04%, ~~and the balance of Fe, provided that~~ Mo in an amount the satisfying the relationship $[Mo+0.5W]$ (Mo-eq.) is 2.5-5.0%, and the balance of Fe, wherein: that

Mo-eq./V is 2-4, and that it

the steel contains carbides of, in the annealed state, $[MC+M_6C]$ -type and/or $M_{23}C_6(M_7C_3)$ -type, and after quenching from a temperature of 1100-1200°C, substantially no remaining carbide or, even contained, almost all the carbides being of MC-type,

the steel has a 10R Sharpy impact value equal to or greater than about 120 J/cm²,

the steel has a hardness (HRC) equal to or greater than about 58, and a difference between hardness by oil-quenching and hardness by controlled clenching of the steel is less than or equal to 0.5.

2. (previously presented) The low alloy high speed tool steel according to claim 1, wherein Si-content is 0.2-0.8%.

3. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains at least one of the group consisting of Ni: up to 2.0%, Cu: up to 1.0% and Co: up to 3.0%.

4. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains B: up to 0.01%.

5. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains Nb: up to 0.1%, and wherein $\text{Mo-eq.}/(\text{V}+5\text{Nb})$ is 2-4.

6. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains at least one of the group consisting of Ni: up to 2.0%, Cu: up to 1.0% and Co: up to 3.0%, and B: up to 0.01%.

7. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains at least one of the group consisting of Ni: up to 2.0%, Cu: up to 1.0% and Co: up to 3.0%, and Nb: up to 0.1%, and wherein $\text{Mo-eq.}/(\text{V}+5\text{Nb})$ is 2-4.

8. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains B: up to 0.01% and Nb: up to 0.1%, and wherein $\text{Mo}_{\text{eq.}}/(\text{V}+5\text{Nb})$ is 2-4.

9. (previously presented) The low alloy high speed tool steel according to claim 1, wherein the steel further contains at least one of the group consisting of Ni: up to 2.0%, Cu: up to 1.0% and Co: up to 3.0%, B: up to 0.01%, and Nb: up to 0.1%, and wherein $\text{Mo}_{\text{eq.}}/(\text{V}+5\text{Nb})$ is 2-4.